

The Baldhead Shoal project included deepening to the 46-foot contour. The Smith Island channel project will deepen an additional 2 feet and add a 50-foot widener to the west side of the channel to retard the shoaling rate.

Port facilities maintained at Wilmington Harbor include 47 major piers, wharves, docks, and mooring dolphins. Fourteen of the major docking facilities in Wilmington Harbor are owned by the North Carolina State Ports Authority. The State Ports Authority facilities include eleven berths and approximately 6,800 feet of berthing. Five container cranes are now in operation at the State Ports (USACOE report September 18, 1992).

Approximately 82 percent of the commerce in Wilmington Harbor is deep-draft, oceangoing trade. In 1990 Wilmington Harbor had 881 vessel calls. Twenty percent of these vessels required some amount of tidal assistance for under-keel clearance, and 9 percent could enter only at high tide. Vessels with drafts greater than 36 feet must be light loaded to transit the ocean bar, regardless of tide. While draft limits are most severe for larger vessels, they affect practically all traffic in Wilmington Harbor. Over the last 4 years an annual average of approximately 240 ships calling at the Port of Wilmington were "Panamax" class ships. Ships in this class are 750 to 950 feet long, have a beam of about 106 feet, and a draft of 38 to 40 feet. The term "Panamax" indicates that this is the largest class of vessel which negotiates the 38.5-foot draft limitation of the Panama Canal. However, these vessels cannot enter Wilmington Harbor without being light loaded, even during high tide (USACOE report 18 September 1992).

With a controlling depth of 38 feet the bar channel effectively limits the use of the entire Wilmington Harbor project. Deepening the ocean bar channel to its authorized 40-foot depth would allow full utilization of the river channels to the Port of Wilmington. However, based on historical data and projections of future vessel sizes, light loading and tidal delays would still occur even if the bar channel is deepened to its authorized 40-foot depth (USACOE report 18 September 1992).